

**TDEC Small MS4 Annual Report**  
**2<sup>nd</sup> Year, July 1, 2004 – June 30, 2005**  
**Report due September 30, 2005**

**Permittee Tracking No.**    **TNS075469**

**Permittee Name:**            **City of Murfreesboro**

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in part 6.7 of the small MS4 general permit.

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Tommy Bragg, Mayor  
Signed

9 28 05  
Dated

Mayor, City of Murfreesboro, TN  
Printed Name and Title

**Send the annual report to the two addresses shown on the next page.**

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RW Mc  
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## I. Status of Compliance with Permit Conditions (5.4.1) Six Minimum Measures, BMPs and Milestones

### A. Status of Compliance with BMP Milestones

The following table is designed for you to report the status of your progress in implementing storm water management BMPs. The table includes a list of BMPs by the code number. These BMP codes refer to the BMPs, and the respective codes, that you submitted to us in your NOI. [Or, in annual reports for years 2-5, these codes refer to amended BMPs as you reported to us in the previous year's annual report]. Add rows if you have more than four BMPs; e.g., 1A, 1B, 1C, 1D, 1E, 1F.

Likewise, the milestone refers to the Year 1 milestone that you included in your NOI. [Or, in subsequent annual reports, the milestone refers to the milestone that you reported to us in the previous year's annual report.]

You must check Yes or No for each of the BMPs that you submitted in your NOI.

- Check **Yes** if the BMP is essentially unchanged and you accomplished the milestone. Indicate a date of completion.
- Check **No** if you did not accomplish the milestone. If you check No, and you are not changing or replacing the BMP or the milestones, indicate the date you expect to complete the milestone.
- Check in one of the **Amended** columns if you wish us to recognize an amended BMP or an amended milestone. If you are amending the BMP, most likely you will also need to amend the milestone, and in that case, check both Amended BMP and Amended Milestone. If the BMP is unchanged, but you are changing milestones in subsequent years, check in the Amended Milestones column.
- If you indicate an amended BMP or milestone, then you should check in last column as well, indicating that you describe the amendment below and provide the necessary analysis in Part VIII.

BMP Code	Milestone	Yes	No	Date completed or If " <u>No</u> ," Date to be completed	Amended/Replaced		An "Amended" response is described below and in Part VIII. Yes/No
		As of 6/30/2005			BMP	Milestones	
1A	Year 2	✓		6/30/2005			
1B	Year 2		✓	11/10/2005			
1C	Year 2		✓	7/05/2005	✓	✓	Yes
1D	Year 2	✓		10/12/2004			
1E	Year 2	✓		6/30/2005			
1F	Year 2		✓	9/13/2005	✓	✓	Yes
1G	Year 2	✓		6/30/2005			
2A	Year 2	✓		4/12/2005			
2B	Year 2	✓		4/9/2005			

2C	Year 2		✓	8/9/2005			
2D	Year 2	✓		4/12/2005			
3A	Year 2	✓		1/1/2005			
3B	Year 2	✓		6/30/2005			
3C	Year 2		✓	7/05/2005			
3D	Year 2	✓		6/30/2005			
3E	Year 2	✓		6/30/2005			
3F	Year 2		✓	9/27/2005			
3G	Year 2		✓	12/15/2005			
4A	Year 2	✓		1/1/2005			
4B	Year 2	✓		6/30/2005			
4C	Year 2	✓		1/1/2005			
4D	Year 2		✓	12/1/2005			
4E	Year 2	✓		6/30/2005			
5A	Year 2		✓	12/15/2005			
5B	Year 2	✓		6/30/2005			
5C	Year 2		✓	12/30/2006		✓	Yes
5D	Year 2		✓	6/30/2006		✓	Yes
5E	Year 2		✓	12/30/2006		✓	Yes
6A	Year 2	✓		6/30/2005			
6B	Year 2		✓	6/30/2006			
6C	Year 2		✓	12/30/2006			
6D	Year 2		✓	12/30/2005			
6E	Year 2	✓		6/30/2005			

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## B. Status of compliance for amended and replaced BMPs

For every amended/replaced BMP and/or milestone above, provide the compliance status with respect to the new milestone for this year. The new milestones must be detailed in Part [VIII](#).

BMP Code	Milestone	Milestone Description	Yes	No	Date completed or If "No," Date to be completed
1C	Year 2	Maintain the call-in numbers; include the number in all publications that are mailed, on City TV and on the web page.	✓		7/05/2005
1F	Year 2	Obtain materials and implement procedures for storm drain labeling.	✓		9/13/2005
5C	Year 2	Staff incorporates review of post-construction water quality features into existing plans review procedures, to the maximum extent allowed under existing ordinance and rules.	✓		6/30/2005
5D	Year 2	Continue to present concepts and make proposals related to more advanced post-construction controls (e.g., reduced impervious surfaces, etc.) to SWAC, to city staff, to the development community	✓		8/29/2005
5E	Year 2	Maintain publicly operated detention areas and drainage ways on routine basis and as needed.	✓		6/30/2005

### Explanation for "No" Responses in either table above

BMP Code	Explanation for "No" Response
1B – Storm water management project brochure	We distributed a past brochure on a limited basis but not a newly developed one. <b>Plan of action:</b> Scheduled for November, 2005.
1C – Hotline number	<p>Rather than a hotline per se, the City broadcasts several citizen input and complaint phone nos., including Engineering (893-6441); Streets (893-4380); Codes (893-3750); and Water &amp; Sewer (848-3200; 848-3218; and 893-1223, after-hours). These are well-known and accessible numbers. Water quality issues in particular are routed to the 848-3200 no. and as of 7/05/2005, this no. was broadcast on City TV.</p> <p>Presently the calls to different departments are tracked in separate databases. Different departments' personnel are knowledgeable about routing call to the appropriate department and person. MWSD is in process of developing a more comprehensive electronic database for tracking complaints and issues. (UAI system)</p> <p><b>We are revising this BMP to refer to a Citizen Call-In Line &amp; Database.</b></p>
1F – Begin educational components for Children's Discovery Center	<p>The Children's Discovery Center (CDC) is a partner with the City in environmental education. However, the City is not in a position to dictate the programs and the timing of them.</p> <p><b>We are requesting to replace this BMP with a storm drain labeling BMP.</b></p>
2C – Storm water program public meetings	<p>Last and this year, we have presented a program summary at a storm water advisory committee meeting. This year the SWAC did not meet in May, June and July, the end of the storm water program year. <b>We reported at the August 9,</b></p>

	<b>2005, meeting.</b> This year we would like to hold a stand-alone public meeting.
3C – Hotline and complaint tracking system	See explanation under 1C above regarding the hotline.
3F – Storm water management guides for susceptible businesses	MWSD sent a restaurant BMP guide to about 210 restaurants and similar businesses <b>9/27/2005</b> . We will continue to produce such guides for susceptible businesses.
3G – Sanitary and storm sewer inspections; train City personnel	<p>Sewer lines are inspected by videotaping in a cycle that takes about seven years to cover the entire sewerage. SSOs are inspected more frequently. Exfiltration of sanitary to storm sewer or stream is believed to be minor.</p> <p>We have briefly instructed personnel of MWSD, Sanitation Dept., Golf Course Dept., and Police Dept. on the matter of illicit discharges. In addition, the City PRIDE program encourages employees to report code violations, safety and maintenance issues.</p> <p><b>Plan of action:</b> Train personnel in other departments specifically on identifying potential sources of pollution; especially those persons in departments with field personnel: Parks, Codes, Urban Environmental.</p>
4D – [Construction] Site Inspection and Enforcement	<p>Procedures and checklists have been drafted and reviewed. Final changes are being made.</p> <p><b>Plan of action:</b> Forms and procedures should be in use by Dec. 1, 2005</p>
5A – Define buffer zone, etc.	<p>A buffer zone ordinance has not been formally presented to SWAC or the public. City staff have prepared a draft that has undergone several revisions. Two presentations on buffers have been made to SWAC. The Planning Commission and the public have been advised of the principles of the buffer zone and of the need to implement a buffer zone policy. City is using the term, Water Quality Protection Area, for this buffer.</p> <p><b>Plan of action:</b> Present the proposal to stakeholders by 12/15/2005.</p>
5C – Post construction BMPs review & approval procedures; 5D – Post construction BMP manual and policies	<p>The milestones for these items had in view adoption of post-construction BMP ordinance and standards in year two (1/1/2005). Our ordinance did not fully address post-construction storm water quality BMPs. The City would like to establish a set of requirements that encourages low-impact (integrated storm water quantity/water quality) development. Such a system is going to require more time to develop.</p> <p><b>Plan of action:</b> See revised BMP and milestones in Part <a href="#">VIII</a>, which includes documenting interim review and approval procedures and preparing a draft set of requirements in Year 3.</p>
5E – Post-construction BMP inspection policies and procedures	<p>We do not have in place a set of post-construction water quality requirements, and thus have not proceeded to develop inspection procedures.</p> <p>The City Street Dept. regularly maintains (primarily mowing) a number of structural storm water controls, primarily detention basins, not water quality controls. In most situations these are in residential areas dedicated to the City as part of storm water infrastructure.</p> <p>The City Street Dept. inspects major drainage ways twice per year and sends crews to clear storm drain inlets and catch basins.</p> <p>Commercial properties with storm water controls, such as detention basins, are responsible for maintenance of their systems.</p> <p><b>Plan of action:</b> See revised BMP and milestones in Part <a href="#">VIII</a>. Continue to practice existing procedures until required water quality BMPs demand a new set of procedures.</p>
6B – Develop SWPPPs for City operations	These are in process, but not yet finished. Order of priority: Street Dept., Sanitation Dept., school bus maintenance operations; MWSD; other operations of fleet maintenance; Golf Dept., Urban Environmental; Parks & Recreation; Police; Fire.

	<b>Plan of action:</b> Street Dept., Sanitation Dept. SWPPPs to be prepared by end of year; school bus maintenance, MWSD by 2/28/2006. Others by end of fiscal year.
6C – Identify sites that need SPCC plans; PE develop plans. Site-specific training.	Sites have been identified; however, plans have not been prepared. <b>Plan of action:</b> Prepare plans through contracted PE. in budget year 2006-7.

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## II. Assessment of the appropriateness of identified BMPs (5.4.1)

For every BMP or amended BMP, assess the appropriateness of the BMP in the following table. For the first year annual report, assume “Good” unless you have evidence to support an inappropriate, minimal or superior assessment.

BMP Code	Short title	We consider the listed BMP appropriate to the following degree:				
		Inappropriate	Minimal	Good	Superior	
1A	Murfreesboro Storm Water Project Web Site			✓		
1B	Storm Water Mgt Project Brochures			✓		
1C	Citizen Call-In Line & Database			✓		
1D	Stones River Greenway System			✓		
1E	Televised SWAC Meetings			✓		
1F	Storm Drain Labeling			✓		
1G	Parks & Rec. Dept., citizen awareness			✓		
2A	Storm Water Advisory Committee			✓		
2B	S/water & Water Quality Appreciation Day			✓		
2C	S/water Mgt Program Public Meetings			✓		
2D	Public Notice for SWAC Meetings			✓		
3A	Legal prohibition & enforcement			✓		
3B	Detection and Addressing Illicit Discharges			✓		
3C	Hot line and Complaint Tracking System			✓		
3D	Inventory of storm water system			✓		
3E	Education			✓		
3F	Storm Water Management Guides for Susceptible Businesses			✓		
3G	Sanitary and Storm Sewer Inspections			✓		
4A	Storm Water Ordinance			✓		
4B	Site Plan Review			✓		
4C	Storm Water BMP Manual			✓		
4D	Site Inspection and Enforcement				✓	
4E	Public Input and Complaints			✓		
5A	Stream Buffer Zones				✓	
5B	Ordinances for Post Construction Runoff			✓		
5C	Procedures for reviewing and approving post-construction runoff controls			✓		

5D	Post-construction BMPs			✓		
5E	Post-construction inspections			✓		
6A	Training Program For City Employees			✓		
6B	Develop SWPPPs for city operations.			✓		
6C	Develop SPCC Plans, sites with above-ground STanks with fuel.			✓		
6D	Vehicle Washing for City Owned Vehicles			✓		
6E	Street Sweeping			✓		

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### III. Progress with respect to MEP and Measurable Goals (5.4.1)

Element 5.4.1 requires you to report progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP)<sup>1</sup>, and the measurable goals for each of the minimum control measures.

#### A. MEP

*Of the [ 33 ]<sup>2</sup> BMPs that comprise our storm water management program in the six minimum measures, we have accomplished Year 1 milestones for [ 32 of 33 ] and Year 2 milestones for [ 18 of 33 ]<sup>3</sup>, as of June 30, 2005. This does represent substantial progress in achieving the statutory goal of reducing the discharge of pollutants to the MEP.*

*Note: As of September 27, 2005, we have accomplished [23 of 33 ] Year 2 milestones .*

#### B. Measurable goals

*Of the [ 33 ] BMPs shown above, we have accomplished Year 2 milestones for [ 18 of 33 ]. This represents progress toward achieving the measurable goals identified in our original NOI and in this annual report. For the measurable parameters goals we have been able to track for this past year, the measurements are recorded in Part IX.*

*Note: As of September 27, 2005, we have accomplished [23 of 33 ] Year 2 milestones .*

Tommy Bragg, Mayor  
Signed

9-28-05  
Dated

Mayor, City of Murfreesboro, TN  
Printed Name and Title

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#### IV. Results of Information Collected and Analyzed (5.4.2)

Element 5.4.2 of the permit requires you to report results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

*A brief summary of information, including analytical and/or non-analytical monitoring results, is listed below. Detailed information is collected and available at the offices of the MS4.*

Parameter	Relevant BMP, or Purpose of Information	Conclusions
Land Disturbance Permits issued	Construction Site Runoff Control Program; BMP 4A, 4B	Approx. 50 LDP issued as of 6/30/2005 and 100 as of 9/22/2005. This represents significant regulatory effort.
Stormwater warning notices to homebuilders; Stop work orders	Construction Site Runoff Control Pgm.; BMP 4D	128 notices as of 8/2/2005 12 stop work orders as of 8/2/2005

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## V. Planned Activities and Proposed Changes to the Storm Water Management Program (5.4.3 and 5.4.4)

### A. Storm water activities planned for next reporting cycle

Element 5.4.3 requires a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule).

*The storm water activities planned for the next reporting cycle are the BMPs as reflected in our NOI and as amended (if any) in subsequent annual reports, including this annual report, and are as follows:*

BMP Code	Title/Name of BMP	Milestone for next reporting cycle
1A	Murfreesboro Storm Water Project Web Site	Maintain / update the site
1B	Storm Water Mgt Project Brochures	Continue to identify specific aspects of the program that impact the public and develop appropriate material.
1C	Citizen Call-In Line & Database	Maintain the call-in number; include the number in all publications that are mailed, on City TV and on the web page.
1D	Stones River Greenway System	Incorporate educational materials into the greenway system to be viewed by the citizens.
1E	Televisе SWAC Meetings	Advertise & televisе SWAC meetings on Cable Channel 3.
1F	Storm Drain Labeling Program	Maintain program and supplies for labeling teams. Keep track of areas labeled.
1G	Parks & Rec. Dept., citizen awareness	Continue to provide storm water information through Parks and Recreation Department and evaluate with Parks and Recreation Department on the effectiveness of dissemination of storm water information.
2A	Storm Water Advisory Committee	Continue with regular meetings. Continue to make decisions as the program deems necessary. Evaluate for effectiveness.
2B	S/water & Water Quality Appreciation Day	Continue to advertise to and incorporate community in storm water day and its related activities.
2C	S/water Mgt Program Public Meetings	Hold one meeting at year-end to summarize year 3 advances and year 4 goals
2D	Public Notice for SWAC Meetings	Continue to notice SWAC meetings.
3A	Legal prohibition & enforcement	Make ordinance known in various public forums. Evaluate yearly the effectiveness and need for changes.
3B	Detection and Addressing Illicit Discharges	Screen additional 30% of outfalls. Investigate reports of illicit.
3C	Hot line and Complaint Tracking System	Track and respond to calls. Evaluate effectiveness and ways to improve.
3D	Inventory of storm water system	Develop means for submittal of digital as-builts tied to Stateplane coordinate system to assist in maintaining GIS

		Database
3E	Education	See Public Education and Outreach BMPs.
3F	Storm Water Management Guides for Susceptible Businesses	Finalize storm water management guide for susceptible businesses.
3G	Sanitary and Storm Sewer Inspections	Institute mechanisms to repair damaged portions of sanitary and storm sewer systems more efficiently so as to limit amount of pollutants entering the City's waterbodies
4A	Storm Water Ordinance	Make ordinance known in various forms. Review the effectiveness of the ordinance.
4B	Site Plan Review	Continue the educational and review process for priority sites; review the effectiveness of the site plan review process and modify as needed.
4C	Storm Water BMP Manual	Review and modify Storm Water BMP Manual as needed.
4D	Site Inspection and Enforcement	<ul style="list-style-type: none"> <li>▪ Incorporate the required procedures for priority sites, including monthly site inspections.</li> <li>▪ Continue the training program for inspectors. Review the effectiveness of site inspection, training and enforcement procedures and modify as needed.</li> </ul>
4E	Public Input and Complaints	Track and respond to calls. Review the effectiveness of the system and modify as needed.
5A	Stream Buffer Zones	Inform regulated community of definition and drafted policies.
5B	Ordinances for Post Construction Runoff	Inform and solicit input from development community on a tiered approach.
5C	Procedures for reviewing and approving post-construction runoff controls	Staff incorporates review of post-construction water quality features into existing plans review procedures, to the maximum extent allowed under existing ordinance and rules. Interim standards documented.
5D	Post-construction BMPs	Involve stakeholders in preparing a draft manual and policies in conjunction with a draft ordinance.
5E	Post-construction inspections	Involve stakeholders in preparing draft policies in conjunction with a draft ordinance and BMP manual and policies.
6A	Training Program For City Employees	Complete training for appropriate employees and train new employees.
6B	Develop SWPPPs for city operations.	Incorporate pollution prevention BMPs into a master plan and establish maintenance schedule for BMPs.
6C	Develop SPCC Plans, sites with above-ground STanks with fuel.	Facility personnel or City staff review SPCC Plan for changes
6D	Vehicle Washing for City Owned Vehicles	Educate employees on benefits of implementing BMPs related to vehicle washing of city owned vehicles.
6E	Street Sweeping	Continue current street sweeping practices.

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*Additional, significant activities planned for the next reporting cycle are noted below.*

Activity	Summary Description	Purpose
Storm water education and public relations	Work with MTSU journalism class on storm water education for the public	Public education

**B. Proposed changes to storm water management program**

Element 5.4.4 requires a report on proposed changes to your storm water management program, including changes to any BMPs or any identified measurable goals that apply to the program elements.

*Amended and replacement BMPs (if any) are reflected in Part I.A. and appendix A, and in the above table and will not be repeated here. Additional, proposed changes are noted below.*

Change to Program	Summary Description	Rationale

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## VI. Water Quality Controls for Discharges to Impaired Waterbodies (3.1.2, 3.1.3)

### A. Impaired waterbodies (3.1.2)

The table below lists impaired waterbodies affected by discharges from this MS4, the pollutants of concern, and the two BMPs we believe to be the most significant in controlling discharges of these pollutants.

In NOI	Present Status	Stream Name	Pollutants/Source	Priority BMP 1	Priority BMP 2
✓	✓	West Fork Stones River TN05130203018_2000 TN05130203018_3000	Siltation, Organic Enrichment, Nitrates/ <i>Municipal Pt Source; Land Development</i>	BMP 4A (EPSC Ordinance)	BMP 3G (Sanitary & Storm Sewer Inspections)
✓	✓	Unnamed Tributary to Lytle Creek 05130203022_0100	Low DO, Pathogens/ <i>Undetermined source</i>	N/A	N/A
✓	✓	Lytle Creek 05130203022	Alterations in stream-side or littoral vegetative cover, Siltation, Escherichia coli, Total fecal colophons/ <i>Discharges from MS4 area</i>	BMP 4A (EPSC Ordinance)	BMP 5A (Buffer Ordinance)
✓	✓	Dry Branch 05130203023_0300	Siltation/ <i>Pasture Grazing, Land Development</i>	BMP 4A	BMP 4D (Construction Inspections)
✓	✓	Bear Branch 05130203023_0310	Alterations in stream-side or littoral vegetative cover, Siltation  Organic Enrichment/ <i>Pasture Grazing, Land Development</i>	BMP 4A	BMP 5A (Buffer Ordinance)
✓	---	East Fork Stones River	Other Habitat Alterations	N/A	N/A
	✓	Sinking Creek 05130203018_0100	Alterations in stream-side or littoral vegetative cover, Escherichia coli, Total fecal coliforms/ <i>Land Development, Discharges from MS4 area</i>	BMP 3F (Priority Businesses Storm Water Mgt Guides)	BMP 4A
	✓	Unnamed tributary to Bushman Creek	Alterations in stream-side or littoral vegetative cover, Siltation, Organic Enrichment/ <i>Pasture Grazing, Land Development</i>	BMP 4A	BMP 5A

Notes: Although public education and outreach and participation are not listed above, we think that those activities are foundational to the priority BMPs listed above.



## B. TMDLs (3.1.3)

*The table below lists impaired waterbodies for which the state has promulgated a TMDL. For the waterbodies indicated, we have complied with the requirements of the permit as noted by the check marks. [The table below includes two columns for two TMDLs. If additional space is needed, add additional table(s).]*

	Waterbody Name/ Pollutant of Concern	Waterbody Name/ Pollutant of Concern
<b>Permit Requirement</b>	<b>Stones River watershed/Sediment &amp; Habitat Alteration</b>	
3.1.3.1 Is the pollutant likely to be found in storm water discharges from the MS4?	Yes	
3.1.3.2 Does the <u>TMDL</u> include a pollutant wasteload allocation, implementation recommendations, or other performance requirements specifically for storm water discharges from your MS4?	Yes	
3.1.3.3 Does the TMDL address a flow regime likely to occur during periods of storm water discharge?	Yes	
3.1.3.4 If the above three questions are true, does implementation of existing storm water control measures meet the TMDL provisions?	Yes	
3.1.3.4-Or are additional control measures are necessary?	--	
3.1.3.5 Current and planned control measures are documented.	Yes	
3.1.3.6 Describe method to evaluate whether storm water controls are adequate to meet the requirements of the TMDL.	See below.	
3.1.3.7 If additional or modified controls are necessary, describe the type and schedule for the control additions/revisions.	N/A	

3.1.3.6, Method to evaluate whether storm water controls are adequate to meet the requirements of the TMDL.

At present, our plans for evaluation involve:

- a. Assessing whether or not we put in place a sound administrative program for controlling construction site runoff.

- b. Is that program effective? That is, does the City keep track of land disturbance activities, are plans being reviewed for quality, and are inspections done to verify implementation of SWPPPs? Are EPSC controls on site effective or are actions taken by the city to bring them into compliance?
- c. Tracking of the administrative actions.
- d. Visual observations of runoff from construction sites and of receiving streams.
- e. Whether or not we effectively communicate the importance of a streamside water quality buffer/natural area protection program and implement the necessary ordinances/policies

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## VII. Protection of Listed Threatened or Endangered Species (3.2)

*We have followed the procedures given in section 3.2 of the Tennessee small MS4 general permit to ascertain whether or not storm water discharges from the MS4 are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA, or result in the adverse modification or destruction of habitat that is designated as critical under the ESA ("critical habitat"). Below is a table indicating the procedures we have followed. We retain documentation of the evaluations and decisions reached through the evaluation.*

[See the permit at section 3.2 for more detailed list of evaluation criteria.]

Evaluation criteria	Yes/ No	Notes
3.2.1.2.1 Criteria A: No endangered or threatened species or critical habitat in proximity to MS4 or the point where discharges reach the receiving water	No	Records indicate there are endangered species present in waterbodies in Murfreesboro.
3.2.1.2.2 Criteria B: Formal or informal consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act (ESA) has been concluded and that consultation addressed effects of storm water activities or resulted in a no jeopardy or not-likely-to-affect opinion.	No	No such consultation of which we are aware.
3.2.1.2.3 Criteria C: Activities are authorized under Section 10 of the ESA	No	N/A
3.2.1.2.4 Criteria D: Evaluated the effects of storm water discharges; we do not have reason to believe the discharge and discharge-related activities will jeopardize species or cause adverse modification or destruction of critical habitat.	Yes	With the MS4 program in place, storm water quality should improve. At present, we do not believe that storm water discharges are jeopardizing threatened or endangered species. In conjunction with the state's regulation of construction site runoff, the city can advise clients when T&E species are potentially present on a development site or downstream. City project Medical Center Parkway is in the watershed of T&E species.
3.2.1.2.5 Criteria E: Our storm water discharges and related activities are already addressed in another operator's certification of eligibility. We agree to comply with conditions of that eligibility.	No	N/A

Signed

*Tommy Blagg, Mayor*

Dated

*9 28 05*

Mayor, City of Murfreesboro, TN

Printed Name and Title

## VIII. Explanation of Amended or Replaced BMPs (from Part I)

*The following table provides description(s) of BMPs and/or milestones we wish to amend this reporting year and subsequent years, as indicated. [Add tables as necessary.]*

For every BMP that is being amended or replaced, provide the following information and analysis. The BMPs you describe here should match the ones you indicated as “Amended/Replaced” in Part I.A. of this annual report.

BMP Code: <b>1C</b>	BMP: <b>Hotline Number</b>
New BMP short title:	Citizen Call-In Line & Database
New BMP description:	Same
BMP is being amended/replaced as:	Ineffective <input type="checkbox"/> Infeasible <input type="checkbox"/> See narrative. <input checked="" type="checkbox"/>
Expected effectiveness of new BMP:	Good
Why is the replacement BMP expected to achieve goals:	Essentially the same BMP; same goal. Change in name. Advertising a water quality call-in number highlights the importance of storm water quality issues and provides a method for citizens to report s/water quality issues.
BMP Milestone Year 1	--
BMP Milestone Year 2	Maintain the <i>call-in number</i> ; include the number in all publications that are mailed, on City TV and on the web page.
BMP Milestone Year 3	Maintain the <i>call-in number</i> ; include the number in all publications that are mailed, on City TV and on the web page.
BMP Milestone Year 4	Maintain the <i>call-in number</i> ; include the number in all publications that are mailed, on City TV and on the web page.
BMP Milestone Year 5	Maintain the <i>call-in number</i> ; include the number in all publications that are mailed, on City TV and on the web page.
Narrative:	Remove references to <i>hotline</i> . Establishing a new phone number, designated as a hotline, turns out to be expensive at present and not completely necessary. The City regularly broadcasts its citizen call-in and complaint numbers and has designated an existing line for water quality related calls.

BMP Code: <b>1F</b>	BMP: <b>Children’s Discovery Center</b>
New BMP short title:	<b>Storm Drain Labeling</b>
New BMP description:	Develop policy and procedures and provide materials for storm drain labeling by citizens.
BMP is being amended/replaced as:	Ineffective <input type="checkbox"/> Infeasible <input type="checkbox"/> See narrative. <input checked="" type="checkbox"/>
Expected effectiveness of new BMP:	Good/excellent
Why is the replacement BMP expected to achieve goals:	Storm drain labeling projects provide high visibility to the storm water pollution prevention message and incorporate not only education of passers-by but also participation by the public.

BMP Milestone Year 1	[Develop policy and procedures.]
BMP Milestone Year 2	Obtain materials and implement program for storm drain labeling.
BMP Milestone Year 3	Maintain program and supplies for labeling teams. Keep track of areas labeled.
BMP Milestone Year 4	Maintain program and supplies for labeling teams. Keep track of areas labeled.
BMP Milestone Year 5	Maintain program and supplies for labeling teams. Keep track of areas labeled.
Narrative:	The Children's Discovery Center (CDC) is a partner with the City in environmental education. However, the City is not in a position to dictate the programs and the timing of them. Because we wanted to implement storm drain labeling, and we can advertise and supervise the labeling, we would like to replace the CDC BMP with storm drain labeling.
Measurable parameter:	Area, in square miles, of those areas of the city that have been labeled; % of area labeled; no. of groups involved in labeling

BMP Code: <b>5C</b>	BMP: <b>Procedures for reviewing and approving post-construction runoff controls</b>
New BMP short title:	Same
New BMP description:	Same
BMP is being amended/replaced as:	Ineffective <input type="checkbox"/> Infeasible <input type="checkbox"/> See narrative. <input checked="" type="checkbox"/>
Expected effectiveness of new BMP:	Excellent
Why is the replacement BMP expected to achieve goals:	Same BMP. No change in BMP; rather a change in milestones.
BMP Milestone Year 1	[Develop procedures for the SWAC to consider. Present to Planning Commission. Notify community & citizens.]
BMP Milestone Year 2	Staff incorporates review of post-construction water quality features into existing plans review procedures, to the maximum extent allowed under existing ordinance and rules.
BMP Milestone Year 3	Staff incorporates review of post-construction water quality features into existing plans review procedures, to the maximum extent allowed under existing ordinance and rules. Interim standards documented.
BMP Milestone Year 4	Develop <i>new</i> review procedures (parameters, checklists, etc.) in conjunction with development of new post-construction runoff control ordinance and BMP manual and policy.
BMP Milestone Year 5	Implement new procedures based on new ordinance and post-construction water quality control standards.
Narrative:	BMP is same; amending milestones. Accomplishing this BMP depends on first establishing a set of post-construction BMP requirements (see BMP 5B). The City presently has plans review procedures that incorporate water feature review; however, the present ordinance and standards are of limited scope with respect to requiring water quality features into new development.

BMP Code: <b>5D</b>	BMP: <b>Post-construction BMP manual and policies</b>
New BMP short title:	Same
New BMP description:	Same
BMP is being amended/replaced as:	Ineffective <input type="checkbox"/> Infeasible <input type="checkbox"/> See narrative. <input checked="" type="checkbox"/>
Expected effectiveness of new BMP:	Good/excellent
Why is the replacement BMP expected to achieve goals:	Same BMP. No change in BMP; rather a change in milestones.
BMP Milestone Year 1	Present concepts and make proposals related to more advanced post-construction controls (e.g., reduced impervious surfaces, etc.) to SWAC, to city staff, to the development community.
BMP Milestone Year 2	Continue to present concepts and make proposals related to more advanced post-construction controls (e.g., reduced impervious surfaces, etc.) to SWAC, to city staff, to the development community.
BMP Milestone Year 3	Involve stakeholders in preparing a draft manual and policies in conjunction with a draft ordinance.
BMP Milestone Year 4	Hold series of stakeholder working group meetings for completing draft ordinance and BMP manual and policies.
BMP Milestone Year 5	Adopt ordinance, manual and policies.
Narrative:	BMP is same; amending milestones. Accomplishing this BMP depends on first establishing a set of post-construction BMP requirements (see BMP 5B). The City presently has a plans review procedure that can incorporate review and approval of water quality features; however, the present ordinance and standards have limited scope with respect to requiring water quality features into new development.

BMP Code: <b>5E</b>	BMP: <b>Post-construction inspections</b>
New BMP short title:	Same
New BMP description:	Same
BMP is being amended/replaced as:	Ineffective <input type="checkbox"/> Infeasible <input type="checkbox"/> See narrative. <input checked="" type="checkbox"/>
Expected effectiveness of new BMP:	Good/excellent
Why is the replacement BMP expected to achieve goals:	Same BMP. No change in BMP; rather a change in milestones.
BMP Milestone Year 1	[Draft policies for consideration by the storm water advisory committee where appropriate. Present to Planning Commission.]
BMP Milestone Year 2	Maintain publicly operated detention areas and drainage ways on routine basis and as needed.

BMP Milestone Year 3	Involve stakeholders in preparing draft policies in conjunction with a draft ordinance and BMP manual and policies.
BMP Milestone Year 4	Involve stakeholders in preparing draft policies in conjunction with a draft ordinance and BMP manual and policies.
BMP Milestone Year 5	Adopt ordinance, manual and policies.
Narrative:	The City presently maintains a number of post-construction storm water detention basins [e.g., those dedicated to the City in development of a subdivision] on an as-needed and complaint basis. In addition, our Street Dept. walks twice per year major drainageways for determining maintenance needs. Street Dept. has extensive knowledge of the system that is applied in prioritizing inspections. Until post-construction water quality controls are required (see 5B, 5C, 5D), the scope of this BMP for water quality purposes is limited. Practically all commercial property, structural storm water controls are privately owned and maintained.

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## IX. Tracking of measurable goals

For each of your BMPs, you should have established a measurable parameter, and goal in terms of that measurable parameter. Measurable parameters are ways to measure activities or effects of a BMP. The goal is the parameter value established as a target. If you are not yet measuring the parameter for a given BMP, indicate Not Applicable Yet (NAY) in the Result column.

BMP Code	BMP Title	Measurable parameter	Result	Goal
1A	Murfreesboro Storm Water Project Web Site	Page on City's web site – Yes/No	Yes	Yes
1B	Storm Water Mgt Project Brochures	Develop and provide brochures to public	No	Yes
1C	Citizen Call-In Line & Database	Advertise call-in number and maintain database	Yes	Yes
1D	Stones River Greenway System	Maintain trails	Yes	Yes
1E	Televis SWAC Meetings	Televis SWAC meetings	Yes	Yes
1F	Storm Drain Labeling	Area of city labeled; no. of groups participating	< 1 sq. mile	20; 100%
1G	Parks & Rec. Dept., citizen awareness	Continue to provide citizens with environmental awareness programs	Yes	Yes
2A	Storm Water Advisory Committee	Appoint representative citizens, etc.	Yes	Yes
2B	S/water & Water Quality Appreciation Day	Annual day to involve community in s/water related activities	Yes	Yes
2C	S/water Mgt Program Public Meetings	Hold enough meetings to satisfy public concerns and inform public	Yes	Yes
2D	Public Notice for SWAC Meetings	Provide notice of SWAC meetings [This BMP not listed in NOI measurable goals.]	Yes	Yes
3A	Legal prohibition & enforcement	Adoption of ordinance	Yes	Yes
3B	Detection and Addressing Illicit Discharges	Identify and eliminate illicit through inspection in priority areas	Yes	Yes
3C	Hot line and Complaint Tracking System	Number of illicit discharges reported and eliminated based on complaint calls	No	#/#
3D	Inventory of storm water system	Develop and implement a full-scale inventory of MS4	Yes	Yes
3E	Education	See PE & Outreach BMPs	--	--
3F	Storm Water Management Guides for Susceptible Businesses	Develop guide(s) tailored to meet the storm water issues of susceptible businesses	Yes; 1	Yes; #
3G	Sanitary and Storm Sewer Inspections	Conduct regular inspection of the sanitary & storm sewer systems	No	Yes; method, frequencies



4A	Storm Water Ordinance	Adopt ordinance.	Yes	Yes
4B	Site Plan Review	Identify and review priority sites	Yes	Yes
4C	Storm Water BMP Manual	Development of a manual of EPSC measures.	Yes	Yes
4D	Site Inspection and Enforcement	Development of site inspection, training and enforcement procedures	No	Yes
4E	Public Input and Complaints	System to receive, document and review public input & com-plaints re: construction runoff	Yes	Yes
5A	Stream Buffer Zones	Establish buffer zone policies	No	Yes
5B	Ordinances for Post Construction Runoff	Ordinance re: post-construction Impervious cover reduced under new ordinance New/redevelopment draining to detention ponds New storm water treatment under new codes	No..... NAY..... NAY..... NAY.....	Yes Acres/De-veloped Acres List
5C	Procedures for reviewing and approving post-construction runoff controls	Changed development codes Final inspections required # site final inspections done	No No NAY	Yes Yes #/#
5D	Post-construction BMPs	BMP Manual prepared	No	Yes
5E	Post-construction inspections	Inspection program in place # sites inspection prior to Cert. of Occupancy	No	Yes #/#
6A	Training Program For City Employees	In-house training program	Yes	Yes
6B	Develop SWPPPs for city operations.	SWPPPs developed	No	Yes
6C	Develop SPCC Plans, sites with above-ground STanks with fuel.	SPCC plans as required	No	Yes
6D	Vehicle Washing for City Owned Vehicles	Policies re: washing of city vehicles	No	Yes
6E	Street Sweeping	Continue street sweeping	Yes	Yes

## Footnotes

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<sup>1</sup> *Maximum extent practicable* (MEP) is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. The CWA requires that NPDES permits for discharges from MS4s “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods.” CWA 402(p)(3)(B)(iii).

<sup>2</sup> Insert the number of BMPs listed in your NOI, as updated by subsequent annual reports. Example: if each minimum measure has five BMPs associated with it, you would insert [30] as the number of BMPs. [6 X 5]

<sup>3</sup> Insert the number of Year 1 [or 2, 3, 4, or 5] milestones accomplished. For example, if 27 milestones are accomplished at the end of the reporting year, then you would insert [27 of 30] in these brackets.